DOCKET NO.: MSFT-2792/306045.01
Application No.: 10/720,506
Office Action Dated: May 4, 2007

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

Amendments to the Drawings

The attached sheets of drawings include changes to Figure 4. The sheets, which include

Figure 4, replace the original sheets Figure 1-4.

Attachment: 4 Replacement Sheets.

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REMARKS

In summary, claims 1-22 are pending. Claims 2, and 8-22 are objected to. Claims 1-7 are rejected under 35 U.S.C. 35 § 101. Claims 1-5, 8-13, and 15-22 are rejected under 35 U.S.C. 35 § 102. Claims 6, 7, and 14 are rejected under 35 U.S.C. § 103. Applicant respectfully traverses the rejections.

In the Drawings

A typographical error is corrected in Figure 4. Entity 406a is amended to recite "generator" to correspond to the specification. A complete set of replacement drawings, including corrected Figure 4, is submitted herewith.

Claims 2 and 8-22

Typographical errors are corrected in claims 2, 16, 20, and 22. Antecedent basis issues are corrected in claims 8 and 22. No new matter has been added. Applicants request withdrawal of the objections to the claims.

Claim Rejections - 35 U.S.C. §101

Claims 1-7 are rejected under 35 U.S.C. § 101 as not being limited to statutory subject matter because the claims appear to lack necessary physical components to constitute a machine. Without prejudice or disclaimer as to the nature of the subject matter disclosed in claims 1-7, claim 1 is hereby amended to recite a computer display. Accordingly, it is requested that the rejection, under 35 U.S.C. § 101, of claims 1-7 be reconsidered and withdrawn.

Claim Rejections - 35 U.S.C. §102(b)

Claims 1-5, 8-13, 15- 22 are rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent 6,199,195, in the name of Goodwin *et al.* (hereinafter referred to as "Goodwin").

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Applicant respectfully submits that the Examiner's grounds for rejection are misplaced, in that the portions cited by the Examiner in Goodwin, Col 8, lines 56-12 and 44-54, and Goodwin itself, does not show or teach each and every element of claim 1 and of the other independent claims.

Amended Claim 1 is as follows:

1.   (Currently Amended) A system for automatically generating source code from a functional model comprising:

a computer display; and

a modeler for defining at least one of a plurality of code elements and a structure of a code block and generating a graphical representation on said computer display displayed on a computer of the at least one code element and structure of the code block, wherein the modeler processes input comprising a code block of source code from an innermost element to an outermost element and generates from the input a code model comprising a graphical representation of a structure and flow of the code block.

No teaching of the Goodwin Modelers working on Source Block Code

Applicants submit that it appears that the Examiner looks to Goodwin at Fig. 1, Fig. 3, 302,304,306, Fig 4 and Col 8, lines 6-12 to show modelers working on blocks of source code. Fig. 1 of Goodwin is the entire code generating system showing use of a modeler (actually modelers 302, 304, and 306), but fails to show a code block as input to a modeler. The Goodwin system teaches of generating logic models (Fig 2. ref. number 202), but no source block code is input or shown. Model adaptors are shown working on the particular modeler utilized, but no input code block per se, is shown or described as an input.

In contrast to a modeler adapter, Applicants' claimed invention is directed to a program that may generate many types of object code (via language selection) from input

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source code (the block code in Claim 1 and others). The modeler found in Goodwin at Fig 1 (302, 304,306) differs from the claimed modeler. As claimed, a modeler includes working on block code as an input, and Goodwin does not teach such function. Applicant submits that the reference fails to teach each and every element of the claims and subsequently fails as a reference under 35 U.S.C. § 102(b).

No teaching of a graphic representation of the structure and flow of the code block

Applicants submit that another claim limitation missing in Goodwin, is that of a modeler creating a graphic representation of the structure and flow of the code block. It appears that the Examiner utilizes Goodwin Col 12, line 65 to Col. 13 line 1, for teaching graphically associating meta data objects with each other. However, no connection or recitation in Goodwin shows that such graphic ability is found in the Goodwin software logic modelers or permits view of both structure and flow of the code block as claimed. Applicants' claimed invention, read a whole, is not found in Goodwin. Applicants submit again that the Goodwin reference fails to teach each and every element of the claims, and subsequently fails as a reference under 35 U.S.C. § 102(b).

Goodwin meta data as described, is not the graphic displayed data as claimed

The Examiner cites to Goodwin at Col 12, line 65 to Col. 13 line 1 to discuss a metadata case tool to graphically associating metadata. The Independent claims recite a graphic display of the code elements and (input) code block, the input of which is to be the modeler. Further this claimed code modeler is a graphic representation of structure and flow of the (input) code block. The meta data modeling discussed in Goodwin is directed to meta data in the schema, these schema defining application business objects, but no mention of source code graphics is made. Applicant submits that the reference fails to teach each and every element of the claims, and subsequently fails as a reference under 35 U.S.C. § 102(b).

No order of Statement Operation Order is found in Goodwin

Applicants submit that the Examiner assumes that with a nesting of control structures and code, an implication arises that the code block parser must operate from inner to outer

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elements. Actually, Goodwin does not discuss any order of operation of element handling. Goodwin also fails to discuss the way or procedure of block code expression handling (some examples being inner, outer, top down, bottom up, algebraic, pushing /popping a stack, reverse polish, etc), as it does not discuss or teach operation on a source code block. Applicants submit that the control structures and block code cited by the Examiner are not input to the modeler, but actually is the modelers output, for subsequent input into the code generator or for use in the model adaptors. As such, Examiner fails to find the necessary elements as defined in the independent claims, that being of the "…modeler processes input comprising a code block of source code from an innermost element to an outermost element…," as recited in claim 1.

Applicant submits again, as the Goodwin reference fails to teach each and every element of the independent claims, Goodwin subsequently fails as a anticipating reference under 35 U.S.C. § 102(b).

Examiner's block code identification is erroneous

The Examiner apparently cites to Goodwin at Col 8, lines 6-12 to find support for input of a code block to a modeler. Applicants respectfully submit that the block code found at Goodwin, Col 8, lines 10-11, is for use in the Goodwin Templates (324). More directly, this described code block is not for entry or input into modeler 202 (Logical Model- Fig. 2), but conversely is the output of the modeler to the modeler adapter 204 or for use with the system definitions (208) (actually templates 324) to develop code in code generator 210. As no such claimed code block is taught in Goodwin to be applied to a modeler and processed as claimed, therefore each and every element of the independent claims is not found in Goodwin, and Goodwin subsequently must fail as a reference under 35 U.S.C. § 102(b).

The remarks and arguments provided above with respect to claim 1 also apply to the balance of the claims, and in particular independent Claims 8 and 22.

In review of the above remarks, arguments and amendments, it is requested that the rejection of claims 1-5, 8-13, and 15- 22 under 35 U.S.C. § 102, be reconsidered and withdrawn.

Claim Rejections - 35 U.S.C. §103

Claims 6, 7, and 14, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,199,195 in the name of Goodwin and further in view of officially noticed computer languages or further in view of U.S. Patent 6,684,385 in the name of Bailey et al.

Each of the rejected claims are dependent directly or indirectly from allowable independent claims and are therefore allowable for the same reasons as discussed above.

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CONCLUSION

It is requested that the forgoing amendments, arguments, and remarks be entered, and in view thereof, it is respectfully submitted that this application is in condition for allowance. Reconsideration of this application and an early Notice of Allowance are respectfully requested. In the event that the Examiner cannot allow this application for any reason, the Examiner is encouraged to contact the undersigned attorney to discuss resolution of any remaining issues.

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